

The meeting adjourned at 9:16 pm.

John M. Heraty for Darlene D. Judd,  
*Recording Secretary*

#### 1003rd Regular Meeting—May 4, 1995

The 1003rd Regular Meeting of the Entomological Society of Washington was called to order by President John W. Neal, Jr. at the National Visitor Center (Beltsville) at 8:05 pm on May 4, 1995. The meeting was attended by 22 members and 19 guests. Minutes for the 1002nd meeting were read by Dr. John M. Heraty for Recording Secretary Darlene D. Judd, and subsequently accepted.

Reports of officers and committees were called for. Membership chair M. Alma Solis announced that there were two new members: Stephen Gamari (University of Illinois, Urbana, IL) and Eric L. Johnson (Aphis-PPQ, Seattle, WA).

President-elect Ralph P. Eckerlin announced the menu of the Spring Banquet was finalized. The banquet date and speaker were reaffirmed.

President Neal announced that it was decided that Dr. Norman E. Woodley and Dr. David Smith would review the Society's by-laws and present their report to the Society in October.

No new business was reported.

Notes, exhibitions, and specimens were called for. Dr. Manya B. Stoetzel made a presentation of some "dark black things" that she identified as conifer-infesting aphids, possibly of the genus *Sinara*. Dr. Nathan M. Schiff commented on the attraction of yellowjackets to aphids on conifers in the fall near the bee research laboratories. Dr. Schiff raised the question about where the meetings would be held next fall. Dr.

Neal commented that they would probably be in the Waldo Schmitt room at the National Museum of Natural History.

Dr. Schiff introduced the speaker for the evening, Dr. James Marden of Pennsylvania State University, who gave a fascinating talk on "Surface Skimming Stoneflies: Testing the Evolutionary Hypotheses of Insect Flight." Dr. Marden has been focusing on the functional morphology of Taeniopterygidae (winter stoneflies). Taeniopterygids are essentially flightless but use their wings to propel them across the water by wing flapping or by raising the wings into a vertical position and using them as sails. Dr. Marden proposed that skimming is a more plausible intermediate step toward developing functional wings for flight than the use of gill flaps for gliding. His work was supported by various experiments on observing skimming behavior, changing parameters of the wings such as length, and characterizing the morphology of wing venation within a phylogenetic perspective to explain the ancestral origin of this behavior. Dr. Marden proposed that the ability to fly may have developed more than once, but the capability for flight may have developed in a surface-skimming ancestor.

Seven guests were presented to the members. Dr. Stoetzel introduced Dr. Curtis Sabrosky and Ms Louise Russell. Ms Russell noted that at age 90 she had been a member of the Society for more than 60 years, many more years than the age of most attending members.

Refreshments were provided by Dr. Manya Stoetzel.

The meeting was adjourned at 9:21 pm.

Dr. John M. Heraty for Darlene D. Judd,  
*Recording Secretary*